

Claims

1. A method for identifying compounds having anti-herpesvirus activity, characterized in that
 - (i) the major capsid protein or one or more fragments of the major capsid protein is/are brought into contact with test compounds, and
 - (ii) the binding of the test substances to the major capsid protein or fragments is measured and
 - (iii) the compounds which exhibit binding to the major capsid protein or fragments are selected.
2. The method as claimed in claim 1, where the herpesvirus is a human cytomegalovirus (HCMV).
3. A method for selecting compounds having anti-herpesvirus activity, characterized in that
 - (i) herpesviruses are brought into contact with test compounds,
 - (ii) resistant herpesviruses are selected,
 - (iii) the gene coding for the major capsid protein of these resistant herpesviruses is sequenced, and the resulting protein sequence of the major capsid protein is inferred,
 - (iv) the compounds with which resistant herpesviruses having one or more amino acid substitutions in the major capsid protein occur are selected.
4. The method as claimed in claim 3, where the herpesvirus is a human cytomegalovirus (HCMV).
5. The use of one or more substances which bind to the viral major capsid protein for producing a medicament for the treatment and/or prophylaxis of infections by herpesviruses.
6. The use as claimed in claim 5, where the herpesvirus comprises human cytomegaloviruses (HCMV).
7. The use of one or more substances identified by claims 3 or 4 for producing a

medicament for the treatment and/or prophylaxis of infections by herpesviruses.

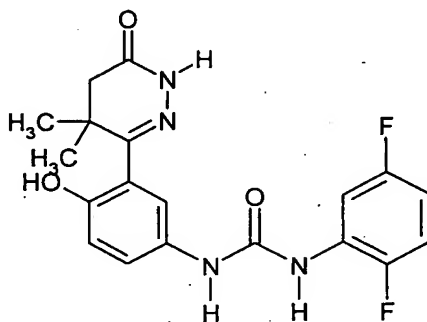
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8. The use as claimed in claim 7, where the herpesvirus is the human cytomegalovirus (HCMV).
9. The use as claimed in any of claims 5 to 8, characterized in that the substance(s) used therein permit the formation of non-infectious B capsids but not the formation of infectious C capsids.
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10. The use of one or more substances which permit the formation of non-infectious B capsids but not the formation of infectious C capsids for producing a medicament for the treatment and/or prophylaxis of infections by human cytomegaloviruses (HCMV).
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11. The use as claimed in any of claims 5 to 6 or 9 to 10, characterized in that viruses resistant to the substance used or to the substances used have one or more mutations in the amino acid sequence of the major capsid protein.
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12. The use as claimed in any of claims 6, 8, 9 or 10, characterized in that one or more mutations in the UL86 protein at one or more of the following positions leads to resistance to the substances:
- R435C, D441N, Y522C, D563N, P586T, V601M, R682H, A689T (cluster 1);
P1189T, P1189S, Q1223R, A1226T, E1320Q, K1338N (cluster 2).
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13. The use as claimed in claim 12, where there are one or more mutations between amino acids 400 and 700, and 1150 and 1370.
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14. A method for inhibiting the replication of herpesviruses by substances which act on the major capsid protein.
15. The method as claimed in claim 14, where the formation of C capsids but not of B capsids is inhibited.
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16. Method according to 14 or 15, where the herpesvirus is a human cytomegalovirus.

17. The use of substances which inhibit the replication of HCMV Towne only inadequately or not at all and inhibit the replication of wild-type HCMV strains for producing medicaments for the therapy and prophylaxis of HCMV infections.

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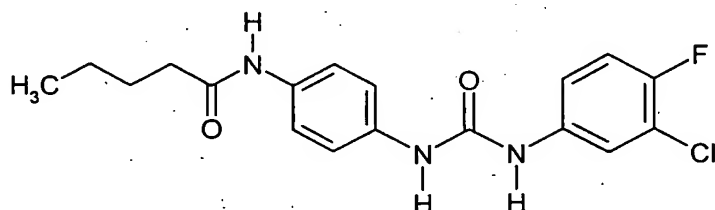
18. A medicament produced by one of the methods as claimed in claims 5 to 17.

19. A compound of the formula

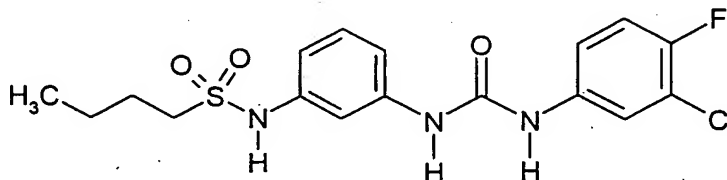


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20. A compound of the formula

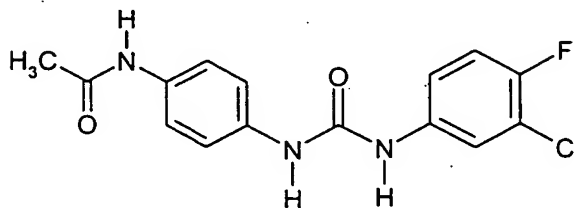


21. A compound of the formula



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22. A compound of the formula



for the treatment and/or prophylaxis of diseases.